

At least one therapeutic agent used in association with the hemofilter to treat an inflammatory mediator disease selected from the group consisting of systemic inflammatory response syndrome, multiorgan system dysfunction syndrome, multiorgan system failure and compensatory anti-inflammatory response syndrome; and  
the therapeutic agent operable to reduce adverse inflammatory mediator effects.

2. The system of Claim 1, wherein the hemofilter comprises a 100 to 150 kiloDalton hemofilter.

3. (Amended) The system of Claim 1, wherein the at least one therapeutic agent comprises a biological agent selected from the group consisting of monoclonal antibodies, anti-tumor necrosis factor, interleukin 1 receptor antagonist and endotoxin antibodies to reduce adverse inflammatory mediator effects.

4. The system of Claim 1, wherein the at least one therapeutic agent comprises a selective pharmaceutical agent to reduce adverse inflammatory mediator effects.

5. (Amended) A method for treating inflammatory mediator related diseases, the method comprising:  
receiving blood from a specimen;  
filtering the blood using a hemofilter, to remove selective inflammatory mediators from the blood; and  
providing at least one therapeutic agent to the blood to reduce adverse inflammatory mediator effects associated with treating an inflammatory mediator disease selected from the group consisting of systemic inflammatory response syndrome, multiorgan system dysfunction syndrome, multiorgan system failure and compensatory anti-inflammatory response syndrome.

6. The method of Claim 5, wherein the therapeutic agent comprises a biological agent.

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7. (Amended) The method of Claim 5, wherein the therapeutic agent comprises a pharmaceutical agent selected from the group consisting of allopurinol, elastase inhibitors and prostaglandin inhibitors.

8. The method of Claim 5, wherein the hemofilter comprises a 100 to 150 kiloDalton hemofilter.

9. The method of Claim 8, further comprising adsorptive device associated with the hemofilter.

10. The method of Claim 5, wherein the therapeutic agent comprises activated protein C.

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11. (New) A hemofiltration system for treating inflammatory mediator related diseases, the system comprising:  
a hemofilter operable to receive blood from a specimen and to selectively remove inflammatory mediators from the blood;  
the hemofilter comprising a 100 to 150 kiloDalton hemofilter;  
the hemofilter associated with an adsorptive device;  
at least one therapeutic agent used in association with the hemofilter to treat an inflammatory mediator disease selected from the group consisting of systemic inflammatory response syndrome, multiorgan system dysfunction syndrome, multiorgan system failure and compensatory anti-inflammatory response syndrome;  
the therapeutic agent operable to reduce adverse inflammatory mediator effects; and  
the therapeutic agent comprising activated protein C.

12. (New) A method for treating inflammatory mediator related diseases, the method comprising:  
receiving blood from a specimen;  
filtering the blood using a hemofilter to remove selective inflammatory mediators from the blood;